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> From: Shelley, Gerald

> Sen'

> To:

> Cc: Dovey, Steve

> Subject: RE: Electronic version of Monday's docs

>

> John

>

> See my other Email.

>

> This is the initial current limit where the controller is applying the

> maximum voltage it can without exceeding the set current limit. As the

> pressure / flow comes down, the resistance reduces, so the controller is

> increasing the voltage and hence the piston travel until a knock is

> detected at around 10s.

>

> Gerald

>

> -----Original Message-----

> From:

> Sent: 4

> To: Shelley, Gerald

> Cc: Dovey, Steve

> Subject: FW: Electronic version of Monday's docs

>

> Gerald,

>

> Does the first paragraph make any sense to you ? We ran a pump here

> yesterday afternoon with the latest controller and it didn't exhibit this

> condition. All we noticed was a build up of drive level (170 - 180 - 190

> etc.. ) over the first ten seconds or so.

>

> John

>

>

>

> -----

> From:

> Sent:

> To:

> Cc: Shelley, Gerald; Dovey, Steve;

> Subject: RE: Electronic version of Monday's docs

>

> John

>

> The pump runs for less than a second, stops, runs again, stops, and

> repeats this cycle a few times and then runs normally. It does not matter

> whether the pump is started with the manifold at atmosphere or vacuum. I

> have asked Carolyn to record the sound of this start up condition and send

> it over to you guys as a sound file. I will also try and get in and have

> a look at the pump. I might not manage this until after the. because

> I am in Wilmington next week. Nothing was said about magnetic fields, or

> vibration. It is assumed we will do what ever it takes to produce a pump

> with zero vibration. They also expect us to produce a quiet pump, or at

> least as quiet as an

>

> When we met in you asked me a few questions and I finally have

> some answers.  
> 1) ~ would prefer the controller to be integrated into the pump  
> assembly.  
> 2) There will be cooling available for the pump, however they want it to  
> be able run at standard lab ambient (up to 35C). The prototypes must be  
> self sufficient; a fan attached to and controlled by the pump will be OK.  
> The point is they don't want to have to worry about rigging up a fan.  
> 3) If the turbo and shuttle combination is as reliable as a turbo and  
> rotary pump they will want to buy the combination as a turbo rig.

> So what do you think?

> Regards

> Carl

> -----Original Message-----

> From:  
> Sent:  
> To:  
> Cc: Snelley, Gerald; Dovey, Steve  
> Subject: RE: Electronic version of Monday's docs

> Carl,

> Do you know what is actually meant by "fires". We can't recollect  
> noticing this condition when we initially ran the pump.

> Was any mention made of the vibration and the level of the magnetic  
> field ?

> Regards,

> John

> -----  
> From:  
> Sent:  
> To:

> G  
> M+

> Subject: FW: Electronic version of Monday's docs

> <<File: shuttle1.xls>><<File: shuttle1.doc>>

> -----Original Message-----

> From:  
> [mailto:  
> Sent:  
> To:  
> Cc:  
> Subject: Electronic version of Monday's docs

> Per your request, attached are two files. One is the  
> Word doc, the  
> other is an updated Excel doc much like the one  
> presented on Monday.  
> Please forward appropriately to England. Thanks and  
> see you tomorrow.

> CB

> and here it is forwarded appropriately. If I have missed  
> anyone out please forward it to them.

>  
> John: One of the items raised in Carolyn's report is the  
> start mode of the shuttle pump. She wants to know if this is normal. "At  
> turn on, the pump intermittently fires several times before settling into  
> a stable pump down mode. This unexpected behavior was of concern at  
> first. However, the pump quickly stabilizes at .65-.9 amps independent of  
> flow rate up to the maximum tested flow of 7 sccm helium." Can you give  
> me an answer by 1:00 p.m. GMT tomorrow afternoon as I will be on the road  
> by 1:30 and would like to take the information with me. Please copy  
with the answer.

> Gerald: It looks like prefer the new IDC mounted inside  
> the turbo. One condition though, it must not have large military style  
> connectors.

>  
> That's all for now.

>  
> Carl  
>  
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